

EXHIBIT A

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Personal Details

Date of Birth: 12th July 1969. Nationality: British.

Employment

2007–ongoing **Professor of Inorganic Chemistry, Durham University.**

2004–2007 **Reader in Inorganic Chemistry, Durham University.**

1999–2003 **Reader in Inorganic and Structural Chemistry, King's College London.**

1995–1999 **Lecturer in Inorganic and Structural Chemistry, King's College London.**

1993–1995 **NATO Postdoctoral Fellow, Universities of Missouri-Columbia & Alabama, USA.**
Organometallic and macrocyclic chemistry. Ten publications, including a chapter in the book *Supramolecular Chemistry of Anions*.

1990 **Research Assistant, University College London.**
Reverse phase chromatographic analysis of candidate polysiloxane coatings for surface acoustic wave (SAW) microsensor devices.

Education

1990–1993 **Ph.D. in Chemistry, University College London.** Major research topics included synthetic organometallic and coordination chemistry and X-ray crystallography. Supervisor: Dr. Derek A. Tocher. Ramsay medal for best Ph.D. 1993; winner Glaxo Travel Award for best presentation 1992. Total of 21 publications from Ph.D. work.

1987–1990 **B.Sc. in Chemistry, University College London.** *First class honours.* Winner Nyholm prize 1990 for best undergraduate in inorganic chemistry. Undergraduate project in π -arene chemistry of ruthenium published: *Polyhedron*, 1991, **10**, 1727.

Research Profile

Professor Steed has extensive experience in research on crystalline molecular solids, X-ray and neutron crystallography and supramolecular chemistry (**RSC Meldola Medal 1998; Bob Hay Lectureship 2008; Corday-Morgan Prize 2010**). His research interests are focussed on soft materials and structural chemistry, particularly non-equilibrium self-assembly, crystallization and 'smart' supramolecular gels. His research encompasses novel pharmaceutical solid form crystallization strategies, the study of pharmaceutical hydrates and gel phase crystal growth methodologies. He has been recently funded by the Engineering and Physical Sciences Research Council for work on metallogels, crystalline hydrates, gel phase crystallization and low symmetry crystal packing. He has undertaken recent projects with GSK on pharmaceutical solid form discovery. He collaborates with Ashland Speciality Ingredients on clathrate hydrate inhibition, Aerpio Therapeutics on pharmaceutical gel formation and with P&G on calcite crystal growth inhibition. He has previously been funded by the Leverhulme trust for work on H₂ activation and storage and by companies such as BP and BNFL. He also has an extensive network of international academic collaborations.

Publications and Presentations

Professor Steed has published *ca.* 300 papers in respected refereed scientific journals and has co-authored two textbooks (*Supramolecular Chemistry*, Wiley, 2000 & 2nd ed. 2009, and *Core Concepts*

in *Supramolecular Chemistry and Nanochemistry*, Wiley, 2007) as well as a number of book chapters on aspects of supramolecular chemistry. He has edited the *Encyclopaedia of Supramolecular Chemistry* (Dekker, 2004) and *Organic Nanostructures* (Wiley-VCH, 2008) and was Editor-in-Chief of *Supramolecular Chemistry from Molecules to Nanomaterials* (8 volumes, Wiley 2012). He is the author of a number of reviews and popular articles in journals such as *Nature* and *Science*. He was associate editor of the RSC/CNRS journal *New. J. Chem.* from 2001–2009 and is currently Associate Editor for *Chemical Communications* (2010–) and series editor for the long-running *Monographs in Supramolecular Chemistry* (2010–). He is a member of a number of international editorial boards and advisory boards. He has given over 50 invited and keynote lectures at a large number of international conferences. Professor Steed's work has been cited over 8000 times, he has a citations H-factor of 46 and is ranked 167th in the world all time Cambridge Crystallographic Structural Database list of most frequent contributors (682 entries).

Professional Activities

- Member EPSRC Peer Review College 2000 – 2014
- Associate Editor for *Chemical Communications* (RSC flagship journal) 2010 – 2016.
- Associate Editor for *New Journal of Chemistry* (RSC/CNRS “all branches” journal) 2001 – 2009.
- Series editor *Monographs in Supramolecular Chemistry* (Royal Society of Chemistry, 2010–).
- Editorial Advisory Panel, *Nature Communications*, 2010–2013.
- Member ISIS neutron crystallography Facility Access Panel 2003 – 2006 (powder and single crystal).
- Expert international reviewer neutron powder diffraction access, Bragg Institute, ANSTO, Australia for powder diffraction instruments ECHIDNA (high resolution) and WOMBAT (high intensity), 2007.
- Stokes Professorship Review Panellist for Science Foundation Ireland, Dublin, 2007.
- Member editorial advisory board for *Chemical Communications* 2000 – 2010.
- Member editorial advisory board for *Journal of Supramolecular Chemistry* 2001 – 2004.
- Member editorial advisory board for *CrystEngComm*. 2002 – 2007.
- Member editorial board for *Main Group Chemistry*, 2005 – ongoing
- Member editorial board for open access journal *Molbank* 2009 – 2011 (<http://www.mdpi.com/journal/molbank/>)
- Visiting Professor, Monash University, Australia, 2000
- Invited Visiting Professor, University Louis Pasteur, Strasbourg, 2004 – 2005
- National Organising Committee International Symposium on Macrocyclic and Supramolecular Chemistry 2011
- Australian Research Council 'expert of international standing' 2004
- Fellow of the Royal Society of Chemistry (CChem FRSC), Member of the British Crystallographic Association (BCA). Member of the American Chemical Society (ACS)
- Member BCA Chemical Crystallography Group Committee 1999 – 2002 and organizer BCA Autumn meeting 2002
- Referee for *Nature*, *Science*, *Journal of the American Chemical Society*, *Angewandte Chemie*, most RSC journals (*Chem. Commun.*, *Dalton*, *NJC* etc.), *Inorganica Chimica Acta*, *Supramolecular Chemistry*, *J. Supramol. Chem.*, *Mendeleev Commun.* and others.
- Ph.D. examiner nationally (Imperial College London, University College London, King's College London, Durham, Queen Mary, Bath, Birmingham, Cardiff, Glasgow, Strathclyde, Surrey, Loughborough, Sheffield, Nottingham Trent, Edinburgh, Heriot Watt) and internationally (Monash and UWA, Australia, Cape Town and Stellenbosch Universities, South Africa, National University of Singapore, University of Valencia, Spain and University of Jyväskylä, Finland)
- External M.Sc. Course Examiner, University College London, 2003 – 2006
- External Undergraduate Examiner Nottingham Trent University 2010 – 2014
- ISIS Target Station II LMX co-proposer and member of the Instrument Advisory Committee

Teaching

- Lecture courses: Basic chemistry; Basic inorganic chemistry; Second year inorganic chemistry; Green chemistry; Instrumental and experimental techniques; Organometallic chemistry; Biological chemistry; X-ray crystallography; “Small molecules”; Supramolecular Chemistry; Organic Chemistry.
- Excellent student assessments.
- Participated in Open University summer schools as a tutor.
- Coordinator for King’s highly successful laboratory methods course
- Pioneered the teaching of Supramolecular Chemistry as an undergraduate topic
- Extensive supervision of postdoctoral researchers, PhD students and undergraduate projects/visitors.

Awards

- Royal Society of Chemistry Corday–Morgan Prize, 2010
- Royal Society of Chemistry Bob Hay Lectureship, 2008
- Vice Chancellor’s Award for Excellence in Doctoral Supervision, 2006
- Royal Society of Chemistry Meldola Medal 1998
- Best Lecture Prize MICRA, 1996
- American Institute of Chemists Best Postdoctoral Researcher Prize, University of Missouri, 1995.
- NATO postdoctoral fellowship, 1993.
- Ramsay Medal for best Ph.D. in chemistry, University College London, 1993.
- Glaxo Travel Award for best lecture presentation, University College London, 1992. This award enabled presentation of Ph.D. work at the XXIXth ICCS in Lausanne, Switzerland and a lecture at the XVth ICOMC in Warsaw, Poland.
- Nyholm Prize for best undergraduate in inorganic chemistry, University College London, 1990.

Student Recruitment, Departmental Profile and Public Understanding of Science

- “Chemistry Flashes and Bangs”, a light hearted demonstration lecture on the various forms of energy given annually 1997–2003 to audiences of *ca.* 300 students aged 16 – 18. Women in Science and Engineering (WISE) lectures (13–15 year old girls).
- Five-year term as vice president of the South London Chemistry Teachers’ Centre, a body made up of school teachers, educationalists and chemists that organises events such as lectures, demos, visits and teachers’ update conferences for teachers and pupils throughout the South East of England.
- Undergraduate recruitment – organisation of departmental recruitment days 1995 – 2003.
- Director of Graduate Studies, Durham University, 2007 – 2010; 2012–2013.
- Articles on aspects of chemical nanotechnology for *The Times Higher*, *Nature*, *Science*, *Chemistry & Industry* and the student journal *Chemistry Review*.
- Podcasts for “Chemistry in its element”, Royal Society of Chemistry, 2009-10.
- Staff Development Course Trainer “Being a Principal Investigator”
- Member of Science Faculty and University Education Committees.

Consultancy and Expert Witness

Professor Steed has acted as a consultant and expert witness in the UK, USA and Canada in the areas of pharmaceutical and pigment solid form (particularly X-ray diffraction), in gel chemistry and in aspects of instrumental and inorganic chemistry.

List of Publications – J. W. Steed**Books**

1. “Supramolecular Chemistry,” J. W. Steed and J. L. Atwood, J. Wiley & Sons: Chichester, 2000. see: <http://www.dur.ac.uk/jon.steed/books.htm> **(Translated into Russian and Chinese 2007)**
2. “Supramolecular Chemistry,” 2nd Ed., J. W. Steed and J. L. Atwood, J. Wiley & Sons: Chichester, 2009. see: <http://www.dur.ac.uk/jon.steed/books.htm>.
3. “Core Concepts in Supramolecular Chemistry and Nanochemistry,” J. W. Steed, D. R. Turner and K. J. Wallace, J. Wiley & Sons: Chichester, 2007. See: <http://www.dur.ac.uk/jon.steed/supnano.htm>

Edited Works

4. “Encyclopedia of Supramolecular Chemistry,” (2 vols + online updates) J. L. Atwood and J. W. Steed (eds.), Dekker: New York, 2004. <http://www.dur.ac.uk/jon.steed/encycl.htm>
5. “Organic Nanostructures,” J. W. Steed and J. L. Atwood (Eds.), Wiley-VCH: Weinheim 2008. See <http://www.dur.ac.uk/jon.steed/books.htm>
6. “Supramolecular Chemistry: from Molecules to Nanomaterials”, (8 vols.), P. A. Gale and J. W. Steed (Eds. in Chief), Wiley: Chichester, 2012.

Book Chapters

7. “Structural and Topological Aspects of Anion Coordination,” J. L. Atwood and J. W. Steed in *Supramolecular Chemistry of Anions*, A. Bianchi, K. Bowman-James, E. Garcia-España eds, J. Wiley & Sons: New York, 1997, ch. 5, pp 147-216. **(Invited)**
8. “Supramolecular Anion Receptors,” J. L. Atwood, K. T. Holman and J. W. Steed in *Advances in Supramolecular Chemistry*, G. Gokel Ed., Vol. 4, JAI Press: Greenwich, 1997, pp 287-331. **(Invited)**
9. “Podand Hosts for Anion Binding and Signalling,” J. W. Steed and K. J. Wallace in *Advances in Supramolecular Chemistry*, G. Gokel Ed., Vol. 9, Cerberus: New York, 2003, ch 5, pp 221–262. **(Invited)**
10. “Molecular Containers: Design Approaches and Applications,” D. R. Turner, A. Pastor, M. Alajarin and J. W. Steed, *Structure and Bonding*, D. M. P. Mingos Ed., Springer-Verlag: Heidelberg, 2004, **108**, 97-168. **(Invited)**
11. “Hypervalent Compounds” (IA094), G. S. McGrady and J. W. Steed in *Encyclopedia of Inorganic Chemistry* 2, R. B. King (Ed.), vol. 3, pp 1938–1961, Wiley: Chichester, 2005. **(Invited)**
12. “Interplay of Non-Covalent Bonds: Effect of Crystal Structure on Molecular Structure,” J. W. Steed in *Frontiers in Crystal Engineering*, E. R. T. Tiekink and J. J. Vittal Eds., Wiley: Chichester, 2006, Ch 4, pp 67–90. **(Invited)**
13. “Definition and Emergence of Supramolecular Chemistry”, J. W. Steed, P. A. Gale and J. L. Atwood in *Supramolecular Chemistry from Molecules to Nanomaterials*, P. A. Gale and J. W. Steed (Eds.), Wiley: Chichester, 2012, **1**, 3–7.
14. “Podands”, A. N. Swinburne and J. W. Steed in *Supramolecular Chemistry from Molecules to Nanomaterials*, P. A. Gale and J. W. Steed (Eds.), Wiley: Chichester, 2012, **3**, 1001–1044.

Scientific Reviews

15. "Laying Traps for Elusive Prey: Recent Advances in the Non-Covalent Binding of Anions", J. L. Atwood*, K. T. Holman and J. W. Steed*, *J. Chem. Soc., Chem. Commun.*, 1996, 1401–1407 **(Invited)**.
16. "Crown Ethers and First and Second Sphere Ligands for Alkali Metal Cations," J. W. Steed, *Coord. Chem. Rev.*, 2001, **215**, 171–221 **(Invited)**.
17. "Organic Macrocyclic Polyamine-Based Receptors for Anions," C. A. Ilioudis and J. W. Steed*, *J. Supramol. Chem.*, 2001, **1**, 165–187. **(Invited)**
18. "Should Solid-State Molecular Packing Have to Obey the Rules of Crystallographic Symmetry?" J. W. Steed, *CrystEngComm.*, 2003, **5**, 169-179. **(Invited Highlight – most accessed article Sept and Oct '03; top 5 Aug and Dec '03. Top 10 all-time most cited article in CrystEngComm)**
19. "A Modular Approach to Organic, Coordination Complex and Polymer Based Podand Hosts for Anions," M. H. Filby and J. W. Steed*, *Coord. Chem. Rev.*, 2006, **250**, 3200–3218. **(Invited)**
20. "A Modular Approach to Anion Binding Podands: Adaptability in Design and Synthesis Leads to Adaptability in Properties", J. W. Steed*, *Chem. Commun.*, 2006, 2637-2649. **(Top ten accessed article June '06; RSC 'top 20 most cited' award 2009)**
21. "Organometallic cativtands: cation– π interactions and anion binding *via* π -metallation," J. T. Lenthall and J. W. Steed*, *Coord. Chem. Rev.*, 2007, **251**, 1747–1760. **(Invited)**
22. "Coordination and Organometallic Compounds as Anion Receptors and Sensors," J. W. Steed, *Chem. Soc. Rev.*, 2009, **38**, 506–519. **(Invited)**
23. "Anion-Tuning of Supramolecular Gel Properties", G. O. Lloyd and J. W. Steed*, *Nature Chem.*, 2009, **1**, 437–442. **(Invited)**
24. "Metal- and Anion Binding Supramolecular Gels", M. M. Piepenbrock, G. O. Lloyd, N. Clarke* and J. W. Steed*, *Chem. Rev.*, 2010, **110**, 1960–2004.
25. "Self-assembly of Tris(ureidobenzyl)amines: Flexible Bricks for Robust Architectures", M. Alajarin*, R. A. Orenes, J. W. Steed and A. Pastor*, *Chem. Commun.*, 2010, **46**, 1394–1403. **(Invited)**.
26. "Exploiting Cavities in Supramolecular Gels", J. A. Foster and J. W. Steed*, *Angew. Chem., Int. Ed. Engl.*, 2010, **49**, 6718–6724.
27. "X-ray and Neutron Diffraction in the Study of Organic Crystalline Hydrates", K. Fucke and J. W. Steed*, *Water*, 2010, **2**, 333–350. **(Invited)**
28. "Anion-Tuned Supramolecular Gels: A Natural Evolution from Urea Supramolecular Chemistry", J. W. Steed*, *Chem. Soc. Rev.*, 2010, **39**, 3686–3699. **(Invited)**
29. "Supramolecular Gel Chemistry: Developments Over the Last Decade", J. W. Steed*, *Chem. Commun.*, 2011, **47**, 1379–1383. **(Invited – most accessed Oct 2010)**.
30. "Mechanochemistry: opportunities for new and cleaner synthesis", S. L. James*, P. Collier, I. P. Parkin, G. Hyatt, D. Braga, L. Maini, W. Jones, C. Bolm, A. Krebs, J. Mack, D. Waddell, W. Shearhouse, A. Guy Orpen, C. Adams, T. Friscic, J. W. Steed and K. D. M. Harris, *Chem. Soc. Rev.*, 2012, **41**, 413–447.
31. "First Glimpse at a Calixarene Clathrate", J. W. Steed, *Chem. Commun.*, 2013, **49**, 114-117.
32. "The Chemistry of Low Dosage Clathrate Hydrate Inhibitors", A. Perrin, O. M. Musa and J. W. Steed*, *Chem. Soc. Rev.*, 2013, **42**, 1996–2015.
33. "The role of co-crystals in pharmaceutical design", J. W. Steed, *Trends Pharm. Sci.*, 2013, **34**, 185–193.
34. "Supramolecular Gel Phase Crystallization: Orthogonal Self-Assembly Under Non-equilibrium Conditions", D. K. Kumar and J. W. Steed*, *Chem. Soc. Rev.*, 2014, **43**,

2080–2088 (**Invited**).

Popular Articles

35. “Spy vs. Spy: Molecular Sensors in Biochemistry and the Environment,” J. W. Steed, *Chemistry Review*, 1997, **6**, no. 4, 2-6.
36. “Cutting Edge,” J. W. Steed, *The Times Higher*, 16 July 1999, p 30.
37. “Crystals that Breathe,” J. W. Steed, *Nature*, 2000, **406**, 943-944.
38. “Young and With Big Ideas,” J. W. Steed, *Chem. Ind.*, 2001, no. 22, 19 Nov, p 735.
39. “The Strong Hydrogen Bond in Crystal Engineering,” J. W. Steed, P. D. Prince, C. Wilkinson and S. A. Mason, *ILL Annual Report*, 2001, 40-41.
40. “Molecular ‘Ghosts’,” J. W. Steed, *Science*, 2002, **298**, 976-977.
41. “Expectations for the quality and originality of submissions to NJC,” C. Bostock-Smith, G. Gokel, J.-P. Majoral, D. Parent, C. Sanchez and J. Steed, *New J. Chem.*, 2004, **28**, E3–E4.
42. “Editorial for George Gokel Special Issue,” J. W. Steed and J. L. Atwood, *New J. Chem.*, 2007, **31**, 617-617.
43. “Editorial for Jerry Atwood Special Issue,” J. W. Steed, *New J. Chem.*, 2008, **32**, 761-761.
44. “Molecular recognition scaled up”, J. W. Steed, *Nature Chem.*, 2011, **3**, 9–10. (News & Views).

Book and Software Reviews

45. “Ca.R.Ine Review,” J. W. Steed, *Software Reviews*, 1999, **19**, 18-20.
46. “Calixarenes for Separations,” J. W. Steed, *J. Chem. Soc., Perkin Trans 1*, 2001, 1848.
47. “Supramolecular Organometallic Chemistry”, J. W. Steed, *Cryst. Growth. Des.*, 2002, **2**, 79.
48. “Supramolecular Analytical Chemistry”, J. W. Steed, *Organometallics*, 2007.

Podcasts

49. “Ruthenium”, *Chemistry in its Element*, Royal Society of Chemistry, 2009. <http://www.rsc.org/chemistryworld/podcast/element.asp>
50. “Niobium”, *Chemistry in its Element*, Royal Society of Chemistry, 2010. <http://www.rsc.org/chemistryworld/podcast/element.asp>
51. “Cisplatin”, *Chemistry in its Element*, Royal Society of Chemistry, 2010. <http://www.rsc.org/chemistryworld/podcast/CIIEcompound.asp>

Scientific Papers.

(a) Undergraduate work

1991

52. “The Reactions of a $[\text{Ru}(\eta^6\text{-arene})\text{Cl}_2]_2$ with a Series of Aminopyridine Ligands: X-ray Crystal Structures of $[\text{Ru}(\eta^6\text{-1,4-MeC}_6\text{H}_4\text{CHMe}_2)\text{Cl}_2(\text{NC}_5\text{H}_4\text{NH}_2)]$ and $[\text{Ru}(\eta^6\text{-C}_{16}\text{H}_{16})\text{Cl}_2(\text{NC}_5\text{H}_4\text{NH}_2)]$ ”, R. Aronson, M. R. J. Elsegood, J. W. Steed and D. A. Tocher, *Polyhedron*, 1991, **10**, 1727-1732.

53. "Hydrogen Bonding XIX. The Characterisation of Two Poly(methylphenylsiloxane)s", M. H. Abraham, G. S. Whiting, J. Andonian-Haftvan, J. W. Steed and J. W. Grate, *J. Chromatogr.*, 1991, **588**, 361-364.

(b) Postgraduate work

54. "Some Reactions of $[\text{Ru}(\eta^6\text{-C}_6\text{Me}_6)(\eta^6\text{-[2.2]paracyclophane})][\text{BF}_4]_2$ with Nucleophiles", J. W. Steed and D. A. Tocher, *J. Organomet. Chem.*, 1991, **412**, C37-C39.
55. "Synthesis and Characterisation of a Pyrazene Bridged Bis(allyl) Ruthenium(IV) Complex. Crystal Structure of $[\{\text{Ru}(\eta^3\text{:}\eta^3\text{-C}_{10}\text{H}_{16})\text{Cl}_2\}_2(\mu\text{-C}_4\text{H}_4\text{N}_2)]\cdot 2\text{CHCl}_3$ ", J. W. Steed and D. A. Tocher, *J. Organomet. Chem.*, 1991, **412**, C34-C36.
56. "Characterisation of the Air and Water Stable Organometallic Ruthenium(IV) Complex $[\text{Ru}(\eta^3\text{:}\eta^2\text{:}\eta^3\text{-C}_{12}\text{H}_{18})\text{Cl}(\text{H}_2\text{O})][\text{BF}_4]$ ", J. W. Steed and D. A. Tocher, *J. Chem. Soc., Chem. Commun.*, 1991, 1609-1610.
57. "Organometallic Carboxylato Compounds of Ruthenium(IV)", J. W. Steed and D. A. Tocher, *Inorg. Chim. Acta*, 1991, **189**, 135-137.

1992

58. "Synthesis of Cationic Ruthenium(IV) Allyl Compounds Containing Chelating N-Donor Ligands: X-ray Crystal Structure of $[\text{Ru}(\eta^3\text{:}\eta^3\text{-C}_{10}\text{H}_{16})(\text{N}_3\text{C}_{15}\text{H}_{11})][\text{BF}_4]_2\cdot\text{CH}_3\text{NO}_2$ ", J. W. Steed and D. A. Tocher, *Inorg. Chim. Acta*, 1992, **191**, 29-31.
59. "Synthesis and Crystal and Molecular Structure of a Novel Ruthenium(IV) Thiocyanato Bridged Dimer", J. W. Steed and D. A. Tocher, *J. Chem. Soc., Dalton Trans.*, 1992, 459-461.
60. "Reactions of $[\text{Ru}(\eta^6\text{-arene})(\eta^6\text{-[2.2]paracyclophane})][\text{BF}_4]_2$ Complexes with Nucleophiles", M. R. J. Elsegood, J. W. Steed and D. A. Tocher, *J. Chem. Soc., Dalton Trans.*, 1992, 1797-1801.
61. "Dinuclear Carboxylato Bridged Complexes of Ruthenium(IV)", J. W. Steed and D. A. Tocher, *Polyhedron*, 1992, **11**, 1849-1854.
62. "Geometrical Isomerism in 2-Hydroxypyridinate and Pyridine-2-thiolate Complexes of Ruthenium(IV)", J. W. Steed and D. A. Tocher, *J. Chem. Soc., Dalton Trans.*, 1992, 2765-2773.
63. "Bi- and Trinuclear Complexes of Ruthenium(IV) with N-Donor Ligands", J. W. Steed and D. A. Tocher, *Polyhedron*, 1992, **11**, 2729-2737.

1993

64. "Mono- and Bidentate Carboxylato Complexes of Ruthenium(IV)", B. Kavanagh, J. W. Steed and D. A. Tocher, *J. Chem. Soc., Dalton Trans.*, 1993, 327-335.
65. "Cyclohexenyl [2.2]Paracyclophane Complexes of Ruthenium(II): Highly Fluxional Agostics from the Sequential Reduction of Arenes", J. W. Steed and D. A. Tocher, *J. Organomet. Chem.*, 1993, **444**, C47-C50.
66. "Synthesis and Electrochemistry of Organometallic Ethanethiolato Bridged Complexes of Ruthenium(IV)", G. Belchem, J. W. Steed and D. A. Tocher, *J. Organomet. Chem.*, 1993, **460**, C30-C33.
67. "Sterically Controlled Double Nucleophilic Addition Reactions of $(\eta^6\text{-Arene})(\eta^6\text{-[2.2]paracyclophane})$ ruthenium(II) Complexes and Reactions to form

Highly Fluxional Agostic Cyclohexenyls”, J. W. Steed and D. A. Tocher, *J. Chem. Soc., Dalton Trans.*, 1993, 3187-3201.

1994

68. “Organometallic Thiol and Thiolato Complexes of Ruthenium(IV)”, G. Belchem, J. W. Steed and D. A. Tocher, *J. Chem. Soc., Dalton Trans.*, 1994, 1949-1962.
69. “Coordination of Primary Amine Ligands to an Allyl Ruthenium(IV) Centre”, J. W. Steed and D. A. Tocher, *J. Organomet. Chem.*, 1994, **471**, 221-228.
70. “Organometallic Complexes of Ruthenium(IV) with Bidentate Oxygen and Nitrogen Donor Ligands”, G. Belchem, D. H. A. Schreiber, J. W. Steed and D. A. Tocher, *Inorg. Chim. Acta*, 1994, **218**, 81-87.
71. Nitrate Complexes of Ruthenium(IV): Chelating, 'Semi-chelating' and Monodentate Coordination Modes”, J. W. Steed and D. A. Tocher, *Polyhedron*, 1994, **13**, 167-173.
72. “Synthesis of Ruthenium(0) dienes from ([2.2]paracyclophane)(arene)ruthenium(II) Complexes and their Subsequent Reactions to form Highly Fluxional Agostics”, J. W. Steed and D. A. Tocher, *Proc. Indian Acad. Sci. (Chem. Sci.)*, 1994, **106**, 691-702.
73. “A Selenocyanate Derivative of an Allyl Ruthenium(IV) Compound”, M. Rowley, J. W. Steed and D. A. Tocher, *Polyhedron*, 1995, **14**, 1415-1418.
74. “Neutral and Anionic Halide Complexes of Ruthenium(IV)”, J. W. Steed and D. A. Tocher, *Inorg. Chim. Acta*, 1995, **229**, 87-93.

(c) Postdoctoral work

75. “A Water Soluble Bear Trap Exhibiting Strong Anion Complexation Properties”, J. W. Steed, R. K. Juneja and J. L. Atwood, *Angew. Chem.*, 1994, **106**, 2571-2572 (in German). English version: *Angew. Chem. Int. Ed. Engl.* 1994, **33**, 2456-2457.
76. “Synthesis of Cationic Organometallic Calixarene Hosts by Direct Metalation of the Outer Face”, J. W. Steed, R. K. Juneja, R. S. Burkhalter and J. L. Atwood, *J. Chem. Soc., Chem. Commun.*, 1994, 2205-2206.
77. “Ball and Socket Nano-Structures: New Supramolecular Chemistry Based on Cyclotrimeratrylene”, J. W. Steed, P. C. Junk, J. L. Atwood, M. J. Barnes, C. L. Raston and R. S. Burkhalter, *J. Am. Chem. Soc.*, 1994, **116**, 10346-10347.

1995

78. “Inclusion Properties of Cyclotetratechylene”, L. J. Barbour, J. W. Steed and J. L. Atwood*, *J. Chem. Soc., Perkin Trans. 2*, 1995, 857-860.
79. “Inclusion Chemistry of Cyclotetrameratrylene”, H. Zhang, J. W. Steed and J. L. Atwood*, *Supramol. Chem.*, 1995, **4**, 185-190.
80. “Supramolecular Chemistry of Calix[5]arenesulfonate: A Water Soluble, Bowl Shaped Host with a Large Molecular Cavity”, J. W. Steed, C. P. Johnson, C. L. Barnes, J. L. Atwood*, D. L. Clark and S. Reilly, R. L. Hollis, P. H. Smith, *J. Am. Chem. Soc.*, 1995, **117**, 11426-11433.
81. “Hosting a Radioactive Guest: Binding of $^{99}\text{TcO}_4^-$ by a Metalated Cyclotrimeratrylene”, K. T. Holman, M. M. Halihan, J. W. Steed, S. S. Jurisson, J. L. Atwood*, *J. Am. Chem. Soc.*, 1995, **117**, 7848-7849.

1996

82. "Inclusion Chemistry of Cyclotrimeratrylene and Cyclotricatechylene", J. W. Steed, H. Zhang and J. L. Atwood*, *Supramol. Chem.*, 1996, **7**, 37-45.
83. "Anion Inclusion Within the Cavity of π -Metalated *p-t*-Butylcalix[5]arene", J. W. Steed, C. P. Johnson, R. K. Juneja, R. S. Burkhalter and J. L. Atwood*, *Supramol. Chem.*, 1996, **6**, 235-240.

(d) King's College London

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